What is claim is:

1. A discrete paper feeder comprising:

a separation roller for separating a single sheet of paper from a plurality of paper sheets that are loaded;

a transfer roller provided in the direction of transfer of said sheet of paper by said separation roller and driven to rotate with a predetermined peripheral speed difference with respect to said separation roller;

a sun gear;

a ring-shaped geared section provided coaxially with said sun gear and having an internally-toothed gear on an inner periphery;

a planetary gear support section provided at an end portion of a rotation shaft of said separation roller;

a planetary gear supported on said planetary gear support section and engaging said sun gear and said internally-toothed gear;

a disc member secured to said geared section and having a groove formed on the side opposite the side on which said geared section is secured;

a lever member provided on the side of said groove of said disc member in a manner slidable in the radial direction of said disc member; and

a slide pin provided on said lever member in a manner projecting and slidable along said grooves of said disc member by the rotation of said disc member.

2. The discrete paper feeder of claim 1 further comprising a reader for reading the contents of said sheet of paper and provided between said separation roller and said transfer roller.

3. The discrete paper feeder of claim 1 wherein said disc member includes an engagement section at an end of said groove to engage said slide pin.

4. The discrete paper feeder of claim 1 further comprising a rotation stopping section for regulating rotation of said lever member in a predetermined direction.

5. The discrete paper feeder of claim 4 further comprising:

a pressing member pressed to the periphery of said disc member; and

a resilient member, one end of which being supported by said pressing member and the other end being supported by said rotation stopping section, for pressing said pressing member to the outer edge of said disc member thereby to urge said lever member outwardly of said disc member.

6. The discrete paper feeder of claim 1 wherein said disc member has, as said groove:

an engagement groove having an engagement section for engaging said slide pin;

a slide groove for peripheral speed difference disposed in series with said engagement groove at the side of the periphery of said disc member along the periphery of said disc member; and

a slide groove for manuscript interval disposed in series with said slide groove for peripheral speed difference to the side of said engagement groove and disposed in a manner extending from said slide groove for peripheral speed difference to the periphery.

7. The discrete paper feeder of claim 6 wherein said disc member has a plurality of said engagement grooves, said slide grooves for peripheral speed difference, and said slide grooves for manuscript interval at even intervals in a manner symmetric with respect to the center of said disc member, and each of said slide grooves for manuscript interval is extending toward the periphery of said disc member and connecting to each of neighboring said engagement grooves.

8. The discrete paper feeder of claim 6 wherein a plurality of said engagement sections are disposed on said disc member in a manner symmetric with respect to the center of rotation of said disc member.

9. The discrete paper feeder of claim 1 further comprising a drive motor for rotating said sun gear.

10. The discrete paper feeder of claim 1 further comprising a paper loading section for feeding said paper sheets to said separation roller.

11. A discrete paper feeder comprising:

a separation roller for separating a single sheet of paper from a plurality of paper sheets that are loaded;

a transfer roller disposed in the direction of transfer of

said sheet of paper by said separation roller and driven to rotate faster than said separation roller by a predetermined peripheral speed difference with respect to said separation roller; and

a driving force control section for transmitting driving force to said separation roller; wherein

said driving force control section absorbs the peripheral speed difference between said separation roller and said transfer roller when said sheet of paper is bitten by both said separation roller and said transfer roller, and said driving force control section interrupts the transmission of driving force to said separation roller for a predetermined period when said sheet of paper leaves said separation roller.

12. The discrete paper feeder of claim 11 wherein said driving force control section includes:

a sun gear;

a ring-shaped geared section provided coaxially with said sun gear and having an internally-toothed gear on an inner periphery;

a planetary gear support section provided at an end portion of a rotation shaft of said separation roller;

a planetary gear supported on said planetary gear support section and engaging said sun gear and said internally-toothed gear;

a disc member secured to said geared section and having a groove formed on the side opposite the side on which said geared section is formed;

a lever member provided on the side of said groove of said disc member in a manner slidable in the radial direction of said disc member; and

a slide pin provided on said lever member in a manner projecting

and slidable along said groove of said disc member by the rotation of said disc member.

13. The discrete paper feeder of claim 12 wherein said driving force control section further includes a rotation stopping section for regulating rotation of said lever member in a predetermined direction.

14. A discrete paper feeder comprising:

a separation roller for separating a single sheet of paper from a plurality of paper sheets that are loaded;

a transfer roller provided in the direction of transfer of said sheet of paper by said separation roller and driven to rotate with a predetermined peripheral speed difference with respect to said separation roller;

a sun gear;

a ring-shaped geared section provided coaxially with said sun gear and having an internally-toothed gear on an inner periphery;

a planetary gear support section provided at an end portion of a rotation shaft of said separation roller;

a planetary gear supported on said planetary gear support section and engaging said sun gear and said internally-toothed gear;

a disc member secured to said geared section and having a groove formed on the side opposite the side on which said geared section is secured;

a lever member provided on the side of said grooves of said disc member in a manner slidable in the radial direction of said disc member; and

a slide pin provided on said lever member in a manner projecting

and slidable along said groove of said disc member by the rotation of said disc member; wherein,

when said sheet of paper is bitten by both said separation roller and said transfer roller, said disc member rotates by the peripheral speed difference between said separation roller and said transfer roller, and the peripheral speed difference between said separation roller and said transfer roller is absorbed by moving of said slide pin in said grooves; and,

when said sheet of paper leaves said separation roller, said disc member makes reverse rotation while said slide pin moves in the reverse direction in said groove thus interrupting transmission of the driving force from said sun gear to said separation roller until said slide pin engages.

15. The discrete paper feeder of claim 14 wherein said disc member includes an engagement section at an end of said groove to engage said slide pin.

16. The discrete paper feeder of claim 14 further comprising a rotation stopping section for regulating the rotation of said lever member in a predetermined direction; wherein,

when said sheet of paper is bitten by said separation roller only, the driving force from said sun gear is transmitted to said separation roller via said planetary gear support section by stopping the rotation of said geared section with said rotation stopping section and said lever member having said slide pin.

17. The discrete paper feeder of claim 16 further comprising:

a pressing member to be pressed to the periphery of said disc member; and

a resilient member, one end of which being supported by said pressing member and the other end being supported by said rotation stopping section, for pressing said pressing member to the outer edge of said disc member thereby to urge said lever member outwardly of said disc member.